

III. Amendments to the Claims:



This listing of claims replaces without prejudice all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-35 (Cancelled).

36. (Currently Amended) A method of recovering a frame transmitted from a network node to a plurality of subscriber stations over a multiple-access link, each of said subscriber stations having a reception-quality associated with said multiple-access link, said method comprising the steps of:

receiving said transmitted frame at a subscriber station;

recovering an identifier from ~~the~~ said transmitted frame using a recovery operation corresponding to a lowest reception-quality of said subscriber stations;

recovering a header from ~~the~~ said transmitted frame when said identifier indicates that said receiving subscriber station is within a range of reception-qualities, said header recovered using a recovery operation corresponding to a lowest reception-quality indicated by said identifier; and

recovering payload packets when said header indicates that said payload packets are addressed to said receiving subscriber station, said payload packet recovered using a recovery operation corresponding to a reception-quality of said receiving subscriber station.

Claim 37 (Cancelled).

38. (Currently Amended) The ~~frame~~ method according to claim ~~37~~ 36 wherein said identifier is packaged for recovery according to an error rate one order of magnitude lower

than a target error rate for said frame.

Claims 39-42 (Cancelled).

43. (Currently Amended) The ~~system~~ method according to claim ~~40~~ 36 wherein said identifier is packaged into said frame using a modulation operation.

44. (Currently Amended) The ~~system~~ method according to claim ~~40~~ 36 wherein said identifier is packaged into said frame using an encoding operation.

45. (Currently Amended) The ~~system~~ method according to claim ~~40~~ 36 wherein said ~~remaining portion is~~ payload packets are packaged into said frame using a modulation operation.

46. (Currently Amended) The ~~system~~ method according to claim ~~40~~ 36 wherein said ~~remaining portion is~~ payload packets are packaged into said frame using a combination of an encoding operation and a modulation operation.

47. (Currently Amended) The ~~system~~ method according to claim ~~46~~ wherein said encoding operation is rate $1/N$ convolutional encoding and N equals at least two.

48. (Currently Amended) The ~~system~~ method according to claim ~~47~~ wherein the result of said encoding operation is punctured.

49. (Currently Amended) The ~~system~~ method according to claim ~~46~~ wherein said modulation operation comprises M-ary QAM.

50. (Currently Amended) The ~~system~~ method according to claim ~~40~~ 36 wherein said ~~remaining portion is~~ payload packets are packaged into said frame using an encoding operation.

51. (Currently Amended) The ~~system~~ method according to claim 40 ~~36~~ wherein said ~~frames are~~ frame is transmitted over a CDMA channel.

52. (New) The method according to claim 36 wherein said reception-quality comprises a measurement of signal-to-noise ratio.

53. (New) The method according to claim 36 wherein said transmitted frame is received over a shared channel that is allocated a portion of the transmission capacity of said multiple access link, another portion of the transmission capacity of said multiple access link being allocated to a plurality of dedicated channels, each dedicated channel providing communication between said network node and one of said plurality of subscriber stations, and wherein at least one of said dedicated channels and said shared channel employs a packaging method for transmissions to a subscriber station that is selected according to the reception-quality of that subscriber station, said packaging method differing from a packaging method employed for transmissions to another subscriber station having a different reception-quality.